

DOCKET FILE COPY ORIGINAL

RECEIVED

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

MAY 1 - 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Federal-State Joint Board	)	CC Docket No. 96-45
on Universal Service	)	
	)	
Tennessee State Department	)	Applicant ID No.
Of Education	)	145698
	)	
Application (FCC Form 471)	)	Universal Service Control
for Approval of Funding	)	No. 144790000000004

To: The Commission

Administrator, Schools  
and Libraries Corporation

SUPPLEMENT TO REPLY

Integrated Systems and Internet Solutions, Inc. ("ISIS 2000") hereby files this supplement to its Reply to Oppositions filed April 27, 1998 ("Reply"), in the above-referenced proceeding. This supplement is being filed to provide the Commission with additional information which has just come to the attention of counsel for ISIS 2000 supporting the findings of the study "Economic Analysis of Education Networks of America" undertaken by Rampart Associates, Inc. ("Stapleton Analysis"), included in the Reply.

In response to the Stapleton Analysis, the President of Education Networks of America ("ENA"), Mr. Al Ganier, has been quoted as follows in an article appearing in

No. of Copies rec'd  
List ABCDE

0+4

Nashville's daily newspaper, The Tennessean, on April 29, 1998:

You can hire an investment banker to give you any evaluation that you want . . . I don't find it a credible assessment.<sup>1</sup>

Contrary to Mr. Ganier's protestations, a pre-bid Investment Proposal circulated by ENA confirms the essential conclusions of the Stapleton Analysis in several key respects. Attachment X is a copy of a document dated December 4, 1997, entitled "Investment Proposal" (hereinafter "Proposal"), prepared by ENA for the purpose of soliciting investors, including ISIS 2000.<sup>2</sup> It was supplied to ISIS 2000 around the time of its original circulation and

---

<sup>1</sup> See Attachment W, The Tennessean article dated April 29, 1998. For background purposes, we have included in chronological order all articles relevant to this proceeding which have appeared in The Tennessean since ISIS 2000's Objection was filed on April 6, 1998. Consistent with ISIS 2000's April 27, 1998 Reply, documentary designations continuing from the last-used Attachment designation will be used to avoid confusion.

<sup>2</sup> Throughout the Proposal, Mr. Ganier describes ISIS 2000 as an "affiliate," "partner" and "shareholder" of ENA. For clarification purposes, ISIS 2000 was never asked by any representative of ENA, in writing or otherwise, if it could be referenced in this Proposal in this manner, nor did ISIS 2000 ever give permission to be referenced as such. Previous to the Department's RFP, ISIS 2000 was approached by Mr. Ganier on several occasions, and discussed the possibility of partnering with ENA with respect to bidding on the Department's RFP, but was never provided a written proposal by ENA. ISIS 2000 determined not to participate with ENA for the following reasons:

- 1) None of the other proposed "partners" had acceptable financial qualifications from ISIS 2000's point of view, including ENA;
- 2) ISIS 2000 fundamentally disagreed with ENA's approach to FCC rules regarding ENA's proposal to purchase the state's network and obtaining USF funding for ineligible equipment and services; and

recently noted in reviewing file material pertaining to the matter.

First, ENA's Proposal confirms its basic scheme to fund the capital cost for the construction of a private statewide commercial telecommunications network that would ultimately serve many users solely from USF and state public funds.

The Investment Proposal states:

ENA expects to make a reasonable profit from the design, installation and operation of the network (See Pro Forma). This proforma only shows a possible revenue stream from a single state contract. Much of the overhead of a national company is not included in the model. Additional contracts should have a much higher margin.

ENT expects to add more users such as private schools, health care providers, and also additional services for all users will be added . . . (emphasis added)

These new services and users could more than double the revenue potential of any network that is built originally for schools. (emphasis added) The incremental cost to add more users and services should provide excellent margins since competitors will have to duplicate many of ENT's systems just to meet its standard level of service.<sup>3</sup>

Second, the Proposal confirms the Stapleton Analysis' estimated range of marketplace value for the network of from \$60 to \$160 million. This estimate was based on a projected annual revenue stream of \$20,000,000 from the Department's contract alone, which is somewhat lower than that projected (\$23,000,000) in the ENA Proposal. See Attachment X, p. 11.

---

3) ISIS 2000 fundamentally disagreed with ENA's technical approach for implementing the Department's network.

<sup>3</sup> Attachment X, p. 5. (Note: These page numbers have been added by ISIS 2000 counsel for ease of reference.)

Third, as indicated above, the Proposal confirms the conclusions of the Stapleton Analysis with respect to the resulting superior competitive position and ability to secure "excellent margins" (Attachment X, p. 5) ENA will obtain with respect to other customers due to its ability to fund all capital costs of the network from public funds from the one Department contract.

Fourth, the ENA Proposal anticipated the purchase of the existing ConnectTEN state network in a wash transaction even before the Department's RFP was written. As stated in the Proposal:

ENA's contract approach should permit 100% of state expenditures to qualify for FCC funds. (\$5 million of state funds with FCC funds of \$10 million provide \$15 million for the state network annually. State funds for additional matching dollars will be available through the sale of existing network that may become surplus property by new network design.) (emphasis added) (Attachment X, p. 4)

Similarly, under the section "Highlights of the Proposed Contract," the Proposal states:

The current state expenditures for the existing network combined with additional resources from the sale of the existing network, matched with FCC funds, will pay the cost of the expanded network and its ongoing operation.

Also attached to this supplement is an updated version of Attachment U of ISIS 2000's Reply to Oppositions (attached hereto as Attachment Y). This is an updated copy of BellSouth's price proposal to ISIS 2000 for T-1 lines which was received on Monday, April 27, 1998, after ISIS 2000 had already filed the Reply. The cost estimates for T-

1 service from BellSouth contained in the updated proposal are the same as those in Attachment U of the Reply.

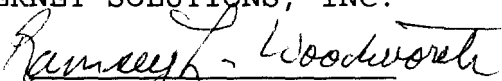
**Conclusion**


ISIS 2000 respectfully requests that the Commission consider the foregoing additional information in its examination of issues in the above-referenced proceeding.

Respectfully Submitted,

INTEGRATED SYSTEMS AND  
INTERNET SOLUTIONS, INC.

By:

  
Ramsey L. Woodworth

  
Rudolph J. Geist

WILKES, ARTIS, HEDRICK & LANE,  
Chartered  
1666 K Street, N.W. Suite 1100  
Washington, D.C. 20006  
(202) 457-7800  
Its Attorneys

May 1, 1998

DECLARATION

Under penalty of perjury, Jeffrey Hustad hereby states as follows:

1. I am Chief Technical Officer of ISIS 2000, Inc.
2. I have read the foregoing "Supplement to Reply," dated May 1, 1998, which I understand is to be filed with the Federal Communications Commission.
3. The facts contained therein are true and correct.

  
Jeffrey Hustad

May 1, 1998



WEDNESDAY

APRIL 15, 1998

TODAY'S  
HIGH

76°

TONIGHT'S  
LOW

60°

Complete weather forecast on 10B

# THE TENNESSEAN

VOLUME 94, NO. 105 • 5 SECTIONS • 3

© Copyright, 1998

PERIODICALS POSTAGE PAID IN NASHVILLE, TN

## 'Net contractor stands to gain millions in deal

By PENNY BENDER

Tennessean Washington Bureau

WASHINGTON — The Tennessee Department of Education will ask the federal government today to cough up \$49 million to expand the state's classroom Internet network.

In three years, that completed network could link as many as 100,000 classroom computers to cyberspace, but would no longer belong to the state. It would be owned and controlled by a small private company headed by Al Ganier, a close friend of Gov. Don Sundquist.



GANIER

Ganier's Education Networks of America was selected by the state Education Department to expand the electrical pathway to link Tennessee children with millions of Web pages worldwide, but the ques-

### TECHNOLOGY

tion of the state having to sell its network to a private company is the crux of a growing controversy in Washington.

The question is whether the state is required to sell its network — the wires, routers and other connectors that link schools with each other and with the Internet — in order to qualify for federal dollars.

The Tennessee Department of Education says that is the effect of the program.

State Education Commissioner Jane Walters said her agency is simply following the regulations of the Federal Communications Commission for a new program called the "e-rate" fund.

The fund has about \$2.25 billion to spread nationwide on school systems, libraries and even consortiums of medical service providers to expand Internet access, especially to children. The application dead-

► Turn to PAGE 2A, Column 3



# State seeking \$49 million for Internet

FROM PAGE 1A

line for those funds is midnight tonight, and some 40,000 entities are expected to apply.

The "e-rate" program is part of the massive telecommunications overhaul passed by Congress in 1996 and is designed so that schools and libraries can buy Internet services at a discounted rate. Congress wanted to avoid creating state-owned telephone companies and Internet providers, so it requires that the e-rate money go to private contractors — not state agencies.

The result, say critics of the program, is a likely windfall for Education Networks of America.

ENA, Ganier's company, would take control of the state network and lease it back to the state, according to his winning bid proposal.

Buying the Department of Education's system and investing e-rate money into upgrading the network means Ganier "could be sitting on a \$100 million company overnight, thanks to the federal government," said Rudolph Geist, an attorney for ENA's competitor, ISIS 2000.

ISIS lost its bid to run Tennessee's program, even though it could get federal funds also to complete

the system, but Geist said a major difference between the ISIS bid and ENA's is that ISIS would not own the system after it's completed.

ISIS 2000, an Arizona company owned by Swedish conglomerate Industriforvaltnings AB Kinnevik, is challenging the Tennessee proposal, alleging Ganier inflated the value of the state's computer network in an attempt to defraud the government. An FCC review is pending.

ENA's bid says it would cost \$74.3 million to build and run the system, \$23 million more than the ISIS 2000 proposal. ENA's bid included an offer to purchase the state network's routers for \$7.5 million. ENA would sell the network's services back to the state for \$7.9 million, even as the company invests another \$13 million into upgrading the network.

ISIS proposed a \$51.3 million contract, offering to buy the schools' network routers for "salvage value" of \$295,400, replacing them with state-of-the-art equipment.

Ganier counters that his proposal is in the best interest of Tennessee children and the state, guaranteeing children at least three hours of Internet access a week and paying the state what its network is worth.

"The state of Tennessee's ap-

proach is significantly cheaper than if each individual school had tried to get the same level of service" from an Internet provider such as America Online, Ganier countered. "I think the schools and library fund will get a top-dollar return."

Regardless of the FCC's ruling on ISIS 2000's complaint, government officials and members of Congress will debate a larger issue: Was the intent of the e-rate program to force state entities to sell their networks to profit-making firms?

The FCC and the Schools and Libraries Corp., the nonprofit group that will award the e-rate grants, declined to comment.

But Capitol Hill legislative aides say lawmakers critical of the e-rate program's funding will be watching the Tennessee case carefully.

"The intent [of the telecommunications act] was to provide affordable access to schools and libraries," said Don Meyer, spokesman for Sen. Olympia Snowe, R-Maine, who sponsored the e-rate program.

"Nothing in the legislation deals" with the ENA situation, he said. "It is up to the FCC and the Schools and Libraries Corp. to decide whether this case stays within the intent of the law."

TECHNOLOGY

# 'Net link in schools faces delay

## FCC complaint filed against state

By PENNY BENDER

Tennessean Washington Bureau

WASHINGTON — Adding as many as 100,000 computers to the Tennessee Education Department's Internet network could take longer than expected because of a complaint against the state filed with the Federal Communications Commission.

The complaint, filed by a losing bidder for the Tennessee project, could trigger an audit of the state's application to the Schools and Libraries Corp.

Tennessee is seeking \$49 million from the federal "e-rate" program, a \$2.25 billion fund set up to increase Internet access in schools and libraries nationwide. It filed its application Tuesday night and is one of as many as 40,000 organizations seeking a piece of the pie.

"We don't know what Tennessee has submitted yet," said Jodie Buening, spokesman for the Schools and Libraries Corp., the quasi-federal organization that is overseeing the e-rate program.

Applications that may "fudge the rules ... run the risk of being flagged" for an audit, she said.

With a limited pot of money going to schools and libraries who get in line first, Tennessee could be shut out this year if it gets pulled out of line because of an audit.

The unsuccessful bidder alleges Tennessee inflated its proposal for federal funding for Internet expansion and the state's application calls for selling its existing computer network to Education Networks of America and leasing services from the company once the network upgrade is completed.

The losing bidder, an Arizona company called ISIS 2000, is protesting the ENA contract and alleges that ENA, owned by a longtime friend of Gov. Don Sundquist, inflated its proposal to qualify for more federal dollars.

The FCC is waiting for a response from Tennessee. The state has until April 20 to answer. ISIS 2000 then has five more days to respond to Tennessee. The commission can take as long as it wants to settle the matter, a spokesman said.

Neither the FCC nor the Schools and Libraries Corp. will comment on Tennessee's proposal to sell its network, but documents provided to schools and libraries applying for grants indicate state-owned networks can't get federal money.

ISIS 2000 "is trying to completely destroy Tennessee's opportunity to participate in the e-rate program," said Al Ganier, Sundquist's friend and president of ENA.

Education Commissioner Jane Walters acknowledged the possibility that the FCC complaint could hurt the state's chances.

"I have to trust the FCC will do what is appropriate," she said. ■

THURSDAY

APRIL 23, 1998

TODAY'S  
HIGH

67°



TODAY'S  
LOW

47°

Complete weather forecast on 1B

ASHVILLE  
TENNESSEE

# THE TENNESSEAN

A GANNETT  
NEWSPAPER

VOLUME 94, NO. 113 • 5 SECTIONS • 3

© Copyright, 1998

PERIODICALS POSTAGE PAID IN NASHVILLE, TN

## TAX DOLLARS

### State says company simply offered best

Al Ganiar offered the best Internet service for public schools for the money, say state officials in defense of their \$74.3 million contract with Ganiar's Education Networks of America. The losing bidder filed a complaint with the FCC. On 1B.



GANIAR

# THE TENNESSEAN

VOLUME 94, NO. 118 • 13 SECTIONS • C

© Copyright, 1998

PERIODICALS POSTAGE PAID IN NASHVILLE, TN

**SUNDAY**

**APRIL 26, 1998**

## Critics: Schools can fall prey to Internet fraud

By FENNY BENDER

Tennessee Washington Bureau

WASHINGTON — Critics say a federal program to link hundreds of thousands of schools and libraries in poor areas to the Internet is ripe for fraud and waste and could leave some communities with equipment they do not need or cannot afford.

To entice public schools and libraries to hook up to the Internet, private, high-tech companies have offered anything

seminars, free meals and software. They even help apply for federal money to develop the system.

With the aroma of \$2.25 billion in the air, it is not surprising that companies will go to those lengths to tap into some of the money paying for the Internet hook-ups.

"It's like watching pigs in a trough," said Ron Walden, president of Informa-

tion Systems by Design Inc., a small Massachusetts company that develops computer systems for schools and companies.

His firm is one of many seeking the funding, but he remains critical of the program because, he said, it burst into being with very little thought.

"There is so much potential for waste. Vendors see the green, and the schools see getting something for free."

Tennessee is among hundreds of ap-

pliants for grants from the \$2.25 billion pot. It's asking for \$49 million to cover two-thirds of the cost of a \$74 million program here. The \$49 million comes from what is called an "e-rate" fund (the "e" stands for education).

The program was created by Congress in the Telecommunications Act of 1996 and is praised by Vice President Al Gore and others as a way to bring the Internet

Return to PACE 2A, Column 1

TELECOM DOLLARS

# Critics: Schools can fall prey to 'Net fraud

FROM PAGE 1B

to those with the least access — children of inner cities and rural communities.

More than 30,000 schools and libraries have applied for e-rate discounts. Qualified libraries and schools will receive anywhere from 20% to 90% off the cost of computer networking services, depending on the community's poverty rate. The companies will get the full price — the discount is paid for by the government.

Dozens of small companies have emerged since Congress passed the Telecommunications Act of 1996, and competition for e-rate contracts is fierce.

For example, two new small firms, ISIS 2000 of Arizona and Education Networks of America, a

Tennessee company, bid for a contract to provide Internet service to 1,500 schools in Tennessee.

ENA won, and ISIS 2000 filed a protest with the Federal Communications Commission alleging fraud in the way the e-rate calculated.

The contract calls for ENA to buy the state's computer network and with the \$49 million from the federal fund expand the system. Afterward, ENA winds up with a valuable but private Internet service company. The case is under review by the FCC.

State Department of Education officials defend the state's decision to hire ENA, a company owned by a longtime friend of Gov. Don Sundquist.

Officials say Al Ganter offered the best service for the money and asked the FCC to throw out the ISIS 2000 complaint.

The pool of money for e-rate dis-

counts, capped at \$2.25 billion this year, comes from fees paid by every telephone user in the nation.

What worries some in the industry is the way the money will be doled out: not to the schools and libraries, but directly to Internet service providers.

So when giants of the industry, Microsoft and Dell, say in a press release that they want "to help schools reap benefits of e-rate discounts" at 10 seminars they are hosting nationwide this month, it is their own firms that stand to gain.

To sweeten the pot, the companies plan to give a Dell Latitude CP notebook to a participant at each seminar.

Representatives from Microsoft and Dell were not available to discuss their seminars and sales pitch, company spokesmen said.

"Telecommunications companies

made quite certain that the money would flow directly to them," said Andrew Blau of the Benton Foundation, a nonprofit group that seeks to make technology available to communities of all economic brackets.

When the Telecommunications Act was drafted, Blau said, "The companies worked very hard to make sure there would be a program to wire schools and libraries but that they would be paid the full-market rate for this program."

It isn't just the largest companies seeking a piece of the federal pie.

Schools, libraries and some computer vendors say examples of possible abuse of the program include:

- An Internet service provider that used "e-rate" in its Web page address, leaving libraries and schools with the impression it was the government organization taking e-rate applications. The Web page has since been pulled off the Inter-

net.

- A telecommunications company offering to file applications for schools and libraries, promising a lower rate for Internet service if they do.

- Service providers and other related technology firms providing small schools with contracts that contain hidden costs and unnecessary technology, such as a \$10,000 "firewall," a computer that protects networks from hackers on the Internet.

Ira Fishman, chief executive officer of the Schools and Libraries Corp., which oversees the e-rate program, said many safeguards to stop fraud from occurring are in place.

Applicants must draft technology plans, put companies through a bidding process and certify that the company has the money to pay its

share of the projects.

In addition, a variety of state governments, trade and nonprofit organizations have offered assistance to schools and libraries with little technological experience.

"We've heard there has been a lot of pressure" to sign contracts, said Lynne Bradley, deputy executive director of the American Library Association's Washington office.

"We are telling people, 'Don't sign long-term contracts, not unless it's what you need,'" Bradley said. "I'm not going to say this system is perfect, but there's a lot of incentive to do the right thing."

Blau of the Benton Foundation agreed.

"The fact that there are unscrupulous Internet providers should not detract from a very important program that Congress said was a national priority." ■

# State's losing bidder challenging schools' Internet access choice

**By PENNY BENDER**

*Tennessean Washington Bureau*

**WASHINGTON** — As Vice President Al Gore touted the Internet as a classroom tool yesterday, his home state of Tennessee faced another hurdle in its efforts to increase Internet access in public schools.

ISIS 2000, the losing bidder for a federally funded project to upgrade Internet availability in Tennessee's 1,560 schools, urged the Federal Communications Commission to disqualify the winning bidder, Education Networks of America, from participating in the federal Internet-in-the-schools program, called "e-rate."

The request follows ISIS 2000's initial allegation of fraud in Tennessee's contract proposal and its request that the FCC throw out the state's application, which seeks \$49 million of federal funding for improved Internet access in schools.

Education Networks of America, or ENA, is owned by Al Ganier, a longtime friend of Gov. Don Sundquist. ENA's bid was \$23 million higher than ISIS 2000 and would result in ENA owning the existing

school Internet network.

ISIS 2000 commissioned an analysis by Rampart Associates, an investment firm with expertise in telecommunications, which determined that ENA would end up owning a network worth as much as \$160 million once it invested \$49 million in federal funds and \$7.5 million from the state to build up the existing state system.

Rampart Associates also backed up ISIS 2000's assertion that ENA and the state had inflated the contract by \$16 million to qualify for more federal dollars.

Ganier and the state have responded that ISIS 2000 submitted an inferior proposal and is disgruntled because it wasn't chosen.

"You can hire an investment banker to give you any evaluation that you want," Ganier said yesterday. "I don't find it a credible assessment."

Education Commissioner Jane Walters was not available for comment yesterday.

A lawyer for the state said Tennessee will file another response this week. ■



**Education Networks of America**

## **Investment Proposal**

This proposal is for qualified investors only.

**For more information, contact:**  
Al Ganier III, President  
615.429.5158  
[partner@nc5.infi.net](mailto:partner@nc5.infi.net)

12/4/97



## OVERVIEW

The Internet for general public use is approximately 3 years old. The advent of Netscape and other similar browsers has made the world's libraries, museums and data bases available to individuals and schools over a network that previously had been only available to a few government and university users.

While deregulating the Telecommunications Industry Congress mandated that \$2.2 Billion dollars annually be provided by telephone companies to assist in the connection of schools and libraries to the Internet. The Federal Communications Commission is managing these funds. The average state's share of these funds is \$40 million. An additional \$400 million is available nationally to assist in the connection of rural health care providers.

Education Networks of America (ENA formerly Technology Partner) with its subsidiaries provides high-speed, reliable data network and Internet services to schools and libraries. ENA under contract with the State of Tennessee designed and built in one year a network (connection) which now connects more than 40,000 computers in 1800 locations to the Internet. ENA's affiliate ISIS 2000 currently manages the Tennessee ConnecTen Network. Al Ganier, CEO of ENA also founded Connect Tennessee Students a not for profit corporation where he raised more that \$3,000,000 in cash, goods and services to supplement state funds to make this network possible.

The governor of Tennessee has proposed in his State of the State address that this network should grow to the point that every child has three hours per week of Internet access. This means that more than 90,000 Internet connected computers will be required. In its effort to dramatically expand its network capacity, Tennessee will be issuing a Request for Proposal. ENT, its affiliates and sub-contractors propose to purchase, expand and manage the Tennessee K-12 Education Network. The scope of a three-year service contract will be approximately \$60 million.

ENA will use this base of proven experience to expand its services into other states or large school districts. ENA will grow its revenues as a prime contractor or bidding as a sub-contractor in areas that others have a distinct advantage of local contacts. A number of providers of hardware and telecommunications services have indicated a need for a partner to make a complete proposal in areas where they have distinct market advantages. For example a major health care provider may contract with ENA to build a network for health care providers in rural areas. A Bell company might use our services to build an education network to keep other competitors from establishing a regional network that might be a competitor for high value commercial services.

Education Networks of America is seeking investors to provide \$2 million of working capital for the initial stages of two contracts. Approximately \$150,000 of expenses is expected during the bid stages of the Tennessee contract. The balance of the initial equity is to provide a credible balance sheet, funds for additional contract bids and working capital for the first two contracts won. Credit lines and Equipment leasing will be used to fund the major expenditures necessary for the operational aspects of contracts. The initial funds will be used for staff, office expenses, professional and engineering services, presentation materials and travel. The credit lines will be used to manage cash flow requirements. The investors will own equity in ENA, which will acquire and develop networks through subsidiaries such as Education Network of Tennessee, in cooperation with companies that have proven expertise in their geographic region.

This local expertise will be supplemented with ENA's technical, business and financial resources. ENA is currently engaged in the exploratory stages of securing contracts in other states to design and build statewide networks for schools, libraries and health care (the Tennessee network as currently structured does not serve health care providers). For example, ENA has made the initial presentation to the Texas Infrastructure Board that is responsible for \$150 million in annual funds to provide these services in Texas. The Texas contract could be more than \$200 million per year when local funds are combined with FCC matching funds (see copy of Texas presentation).

### New Funds Available to Drive This Industry

ENA is uniquely positioned to meet a demand that is being accelerated by the availability of new funds for Internet access. The following are examples of new resources targeted to pay for Internet access for schools:

1. \$2.2 billion per year from the Universal Internet Service Funds (FCC) to build Internet services for K-12 education and libraries. (Section 254(h) of the Telecommunications Act of 96 or the Snow-Rockefeller Amendment) (available January 1, 1998)
2. \$400 million (FCC) per year for Internet services for healthcare. (available January 1, 1998,)
3. \$400 million per year from Medicare for rural healthcare providers. (available 1998)
4. \$500 million from the U.S. Department of Education for Technology Literacy Grants. (Available now)
5. New appropriations from state and local governments to meet the demand for Internet services.

These funds will accelerate the already rapid spread of Internet services for schools, libraries and healthcare.

## **EXISTING TENNESSEE NETWORK**

The Tennessee K-12 Education Network is an Intranet that was developed by private companies under contract with the State of Tennessee. It provides students with access to the Internet and has rapidly evolved into an administrative working tool with the Department of Education, local school districts and their schools. For instance, 1100 grant applications were filed directly by the schools over the Internet to the Department of Education. This compares to fewer than 200 in the previous year via a paper application process.

Some of the administrative uses include:

\*Grant applications-e.g. , 1100 grant applications were filed directly by the schools over the Internet to the Department of Education. This compares to fewer than 200 in the previous year via a paper application process.

- student attendance records
- federal vocational training data
- registration for continuing education.

Jane Walters, Commissioner of Education; Jackie Shrago, Board of Regents vice-chancellor; and Al Ganier, President of Education Networks of America led the development of this network. (ENA provided design, installation and development of services for the current network). Although this network is little more than a year old, it connects all of the K-12 Schools to the Internet. Forty thousand computers in these schools provide student access to the world's libraries, museums and databases. The network is currently managed from a central location by ISIS 2000 - Integrated Systems and Internet Solutions, Inc., an affiliate of ENA and a shareholder of Educational Network of Tennessee, a subsidiary of ENA. ISIS 2000 was located by ENA after a National search and brought to Tennessee to provide on going management for the Tennessee network.

The network has dramatically outgrown its original design expectations. The original expectation was to have 7,500 computers connected in the first year. However, the ease of connecting additional computers through software and network strategies provided by the principals of ENA made it possible to connect 40,000 computers to the Internet. The state is seeking ways to continue expanding the network while improving network efficiencies within its budget limits. It has requested input for the development of an RFI (Request for Information - copy attached) which will lead to an RFP (Request for Proposal). ENT has been invited to participate in this process. ENT will be the prime bidding contractor in concert with teaming partners that are currently providing the majority of services necessary to manage, operate, and upgrade the network.

## **ENT AND ITS TEAMING PARTNERS**

The members of the consortium of teaming partners proposing the Tennessee project are:

- Education Networks of America (formerly Technology Partner)  
Contracted by the state of Tennessee to provide the initial design, installation of the network and outsourcing of its management. ENA will be the prime contractor.

- *BellSouth and twenty-five other Tennessee telephone companies (Vendors only)*  
Provides the network telecommunications lines, including access to the Internet via BellSouth.net.
- *ISIS 2000 \**  
Current provider to state of Tennessee of all Help Desk services and electronic management of the Network. ISIS will continue to provide these services and engineering work for the expanded network.  
*\*Shareholder of ENT*
- *ISDN Net*  
One of Tennessee's largest providers of business Internet services, with more than 600 business customers and thirty-one Internet Service Providers that rely on ISDN to provide full Internet access, will provide engineering and installation of complex services.

Other sub-contractors such as wiring vendors will be utilized for the installation of expanded network services.

## NATIONAL PERSPECTIVE

The McKinsey & Company study for the Federal Government estimates that the cost of accomplishing the initial connection of all classrooms to the Internet will exceed \$46 billion, with an additional \$13 billion per year in ongoing costs. Beginning in 1998, the FCC will provide \$2.2 billion nationally each year to supplement the development of educational and health care networks.

For example it is estimated that for every qualified \$3 dollars Tennessee spends, the FCC will pay approximately \$2 of the \$3. Currently Tennessee is spending \$5 million annually of which approximately \$3.5 million may qualify for matching funds. ENA's contract approach should permit 100% of state expenditures to qualify for FCC funds. (\$5 million of state funds with FCC funds of \$10 million provide \$15 million for the state network annually. State funds for additional matching dollars will be available through the sale of the existing network that may become surplus property by new network design.)

States and local school systems are investing significant funds for the work of connecting its students to the Internet. Due to the rapidly changing technology, most governments are looking for solutions from outside contractors with experience. Tennessee and other states are in the business of providing education— not Internet access and related network services.

## WHAT'S UNIQUE ABOUT ENA?

ENA and its subsidiary are made up of the parties that designed, installed and are currently managing the largest and most cost-effective education network in the United States. This network is a working demonstration of the company's capacity to deliver and manage a sought after service. The management team consists of highly skilled individuals who have been on the leading edge of remote, distributed network development for years, even before the expansion of the Internet.

## HIGHLIGHTS OF THE PROPOSED CONTRACT

- The current state expenditures for the existing network combined with additional resources from the sale of the existing network, matched with FCC funds, will pay the cost of the expanded network and its ongoing operation.
- Additional revenue opportunities for ENT services are enhanced by the availability of Technology Literacy Grants and other technology expenditures. Included in the bid will be a menu of available services that may be purchased by local school districts or the state should additional funds become available.
- The contract should exceed \$60 million over the next three years.
- A middle net strategy, which is a combination of, increased bandwidth, new routers, caching, and updated software will be proposed to meet the demand of each school.
- To the extent any school, healthcare provider, or library wishes to have additional services other than what the state contract provides, it can contract separately with ENT for these.

## REVENUE

ENA expects to make a reasonable profit from the design, installation and operation of the network (See Pro Forma). This proforma only shows a possible revenue stream from a single state contract. Much of the overhead of a national company is included in the model. Additional contracts should have a much higher margin.

ENT expects to add more users such as private schools, health care providers, and also additional services for all users will be added such as:

- \*In school wiring
- \*Educational content
- \* Software
- \*Hardware
- \*Training
- \*Remote school /network management

These new services and users could more than double the revenue potential of any network that is built originally for schools. The incremental cost to add more users and services should provide excellent margins since competitors will have to duplicate many of ENT's systems just to meet its standard level of service.

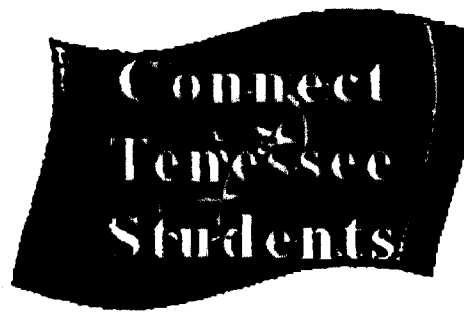
## **USE OF FUNDS**

ENA requires an infusion of capital to cover the costs of making the bid to the state of Tennessee through ENT (Education Network of Tennessee- a subsidiary). The majority of the funding will be required to provide sufficient resources to meet the requirements of the contract. The bid and negotiation period is expected to take three months and cost approximately \$150,000. A contract decision should be made as early as March 1998. The funds will be used for expanded staff, office expenses, professional and engineering services, presentation materials and travel. If the contract is won then equity, leasing and credit lines will be used to meet cash flow management in the early stage of the contract. Additional funds will be used to fully develop staff and to pursue other contracts in states such as Texas and large school districts.

## **SUMMARY**

ENA has the experience and market position in a rapidly expanding industry to become a national leader in the provision of network services for the education, rural health care, and libraries of America. This market has historically lagged behind other industry groups' adoption of communications technology. National policy makers are universally in favor of accelerating student access to the Internet. Legislation has been passed on a non-partisan basis to provide billions of dollars for this business.

ENA and its affiliates are responsible for the largest and most advanced Internet access education network in the US. The urgency created by a combination of new funds and the first-come-first-serve nature of these funds positions a company such as ENA that has deployed a statewide network in less than one year, to bid for additional business. This strategic advantage with additional capital will permit ENA to grow rapidly and profitably.



**E-RATE**  
F. C. I.

**TLG**

**GOALS 2000**



**Mission:**

Connect Tennessee Students is a program that elevates and levels the learning field for each student in Tennessee. It's designed to make every youngster in Tennessee schools a citizen of the global community through access to the World Wide Web.

To learn more about how Connect Tennessee Students affects you - or how you can positively affect the futures of thousands of Tennessee schoolchildren - contact:

**Al Ganier, president, Connect Tennessee Students**

**By Mail: Suite 103-218**

**73 White Bridge Road, Nashville, TN 37205**

**Email Address: [partner@nc5.infi.net](mailto:partner@nc5.infi.net)**

**In person or deliveries: ATTN: Al Ganier, c/o Commissioner Jane Walters, Tennessee Department of Education, 6th Floor, 710 James Robertson Parkway, Nashville, TN 37243-0375. (615) 741-2731, FAX: (615) 741-6236.**



Connect Tennessee Students is a not-for-profit corporation working in partnership with state government and private business to bring the educational benefits of computer technology into the Tennessee classroom.

 To Higher Ed Home

To 21st Century Campus Home



Microsoft in Higher Education

the 21<sup>st</sup> Century Campus

## The Microsoft Vision: The Connected Learning Community

A Learning Revolution

Learning for a Lifetime

Higher Education's  
Technology Challenges

The Microsoft Vision:  
The Connected  
Learning Community

Microsoft's  
Commitment

Participate in the  
Conversation

**Students and faculty have access to a vast knowledge base and rich instruction, including students and educators worldwide**



Technology eliminates the restrictions of time and place, making the world's classroom available to students and faculty anytime, anywhere. Using a PC and the Internet, a student burning the midnight oil on an art history project at an Alaskan community college can visit the Louvre Art Museum in Paris. The Internet also allows students and faculty members to participate in a global learning conversation by sharing ideas and opinions with others from around the world. Students using the Internet as a forum for debate of intellectual ideas become active learners and participate in the development of the world's knowledge base. College and university scholars share their writing and research and participate in the peer review of others' work. At Columbia University in New York City, CIAO - Columbia International Affairs Online - recently was launched. CIAO is an interactive web site offering international affairs "papers in progress" from more than 50 research institutes at colleges and universities throughout the world, allowing international affairs scholars to receive feedback on their work from their peers.

*"Technology is the tool that allows us to disseminate the highest quality scholarly work, and to facilitate interactive discussion and debate on work at a level that has never been possible before. Online resources offer students in remote areas and different locales access to the same information, and enable libraries to provide new collections of materials. Technology provides students, scholars, librarians - anyone - access to the latest and best information and research available."*

Kate Wittenberg, Editor-in-Chief, Columbia University Press/Columbia International Affairs Online

Technology also builds links between the 21<sup>st</sup> Century Campus and the greater Connected Learning Community by encouraging communications between students from different colleges and universities and from different walks of life. At Vanderbilt University in Nashville, Tenn., student volunteers have opened the doors to the world of information technology for hundreds of Native American K-12 students from Arizona, California, Tennessee, South Dakota and Washington schools. The university group is called SNAP - Student and Native



videoconferencing software. Back at school, they used computer-based videoconferencing to teach the students and teachers how to use the Internet's educational resources, learning about cultural and training issues while sharing their technology knowledge with K-12 students.

*"The Internet has allowed us to engage other peoples, cultures and nations, in ways we never thought possible. Within our own environments, we can participate in an unlimited exchange of ideas, beliefs, hopes and aspirations. Empowered by access and connectivity, students and teachers exhibit more positive attitudes towards learning; student achievement rises; and everyone is more excited about coming to school in the morning. Lifelong learning is a reality."*

Jason Dinger, Vanderbilt University Senior and Coordinator, Student and Native American Partnerships

© 1997 Microsoft Corporation. All rights reserved. Terms of use.  
Last Updated: November 10, 1997